

Attorney's Docket No.: 16491-022001

REMARKSRECEIVED
CENTRAL FAX CENTER

AUG 20 2007

Claims 13-19 and 26-39, and 41-60 are pending. Claims 13, 37, 59, and 60 are in independent form. Reconsideration and withdrawal of the present rejection is respectfully requested.

CLAIMS 13 AND 37

As shown above, claims 13 and 37 have been amended to recite subject matter drawn from claims 19 and 40, respectively. Accordingly, the rejections of claims 13 and 37 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent Publication No. 2002/0137994 to Baker and U.S. Patent No. 4,336,810 to Anderson are obviated.

However, claims 19 and 40 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,524,631 to Zahorian et al. (hereinafter "Zahorian").

As amended, claim 13 relates to a method that includes receiving a cardiac biological signal that includes information describing events, determining a merit of the information in the cardiac biological signal describing each event based on one or more of a severity of a cardiac condition associated with the event and a quality of the information describing the event, transmitting, for medical purposes, information describing a first proper subset of the events that have merits meeting a merit criterion to a remote medical receiver, and discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion. Events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose.

Claim 37 relates to an article that includes one or more machine-readable media storing instructions operable to cause one or more machines to perform operations. The operations are comparable to the activities recited in claim 13.

Attorney's Docket No.: 16491-022001

The rejections of claims 13 and 37 were based on the contention that Zahorian's derivation of a figure of merit for different heart rate estimates inherently involves determining a merit of the information in a cardiac biological signal describing an event, as recited.

Applicant respectfully disagrees. As discussed in the response filed May 7, 2007, Zahorian determines heart rate estimates for multiple signals from multiple channel sensors, each of which is treated using a pair of nonlinear filters. *Id.*, col. 8, line 35-36. These estimates are ranked using figures of merit that are derived from continuity constraints and a measure of periodicity in the waveform. *Id.*, col. 8, line 36-40. This can be seen from Zahorian's FIG. 3, which is now reproduced for the sake of convenience.

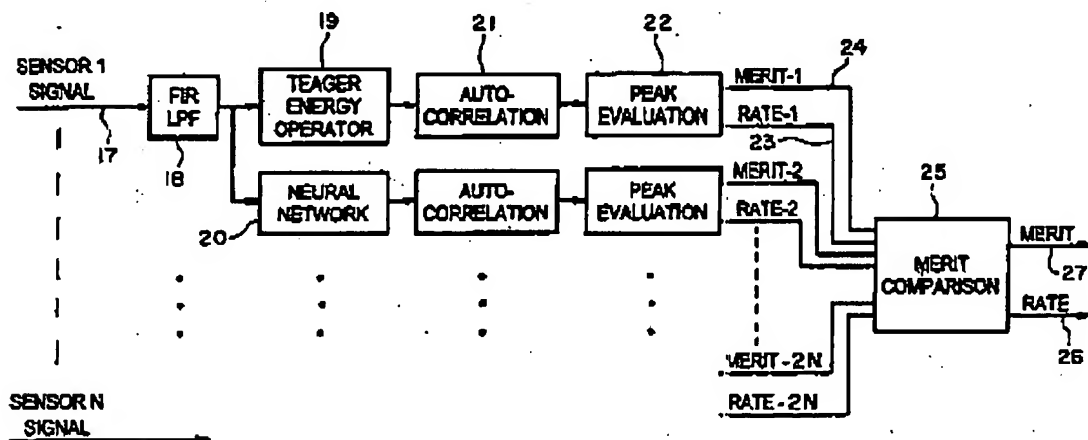


FIG. 3

Please note that the rejection does not rely upon Zahorian's comparison of the merits of the heart rates determined from different sensor signals. This is perhaps not surprising, given that claims 13 and 37 both recite that a (singular) cardiac biological signal includes information describing (plural) events. Instead, the rejection contends that:

Attorney's Docket No.: 16491-022001

"each signal contains the information necessary to create an estimate. The fact that the estimates are produced merely by filtering the incoming signals (i.e., no other signals or information is introduced or added), shows that the incoming signals inherently contain this information; it just must be extracted from other unwanted information and noise." *See Office Action mailed May 24, 2007*, paragraph bridging page 2-3.

While this statement is true as far as it goes, it neglects to consider that the same signal with the same information content is being filtered by the different filters. As discussed in the response filed May 7, 2007, Zahorian uses "multiple parallel non-linear filters" to identify fetal heart beats from the acoustic sensor data. *Id.*, col. 5, line 49-51. The same signals are provided to the two different filters, which "operate in parallel and provide redundant identification of fetal heart beats." *Id.*, col. 5, line 53-55.

Since this single signal input necessarily has the same information content, Zahorian's figures of merit do not reflect the merit of the information in that signal. Instead, Zahorian's figures of merit reflect the merit of the different non-linear filters applied to that information. In other words, since the same signal is input to Zahorian's different filters, the merit of the information input to both filters is necessarily identical. Zahorian's figures of merit do not reflect the merit of the information in the same signal. Rather, they reflect that merit of the filtering applied to that signal.

Accordingly, claims 13 and 37 are not anticipated by Zahorian. Applicant respectfully requests that the rejections of claims 13, 37, and the claims dependent therefrom be withdrawn.

CLAIMS 59 AND 60

Claims 59 and 60 have been added to recite subject matter related to that recited in former claims 31 and 42. Please note that various changes have been made.

Attorney's Docket No.: 16491-022001

However, claims 59 and 60 are believed to be allowable over Baker and Anderson for the same reasons as former claims 31 and 42. Claims 59 and 60 are also believed to be allowable over Zahorian since Zahorian's figures of merit do not reflect the merit of the information in the same signal. Rather, Zahorian's figures of merit reflect that merit of the filtering applied to that signal.

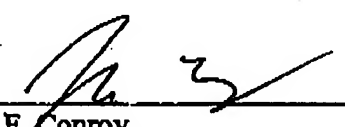
Accordingly, claims 59 and 60 are also believed to be allowable.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please charge the excess claims fees and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: August 20, 2007



John F. Conroy
Reg. No. 45,485

Fish & Richardson P.C.
12390 El Camino Real
San Diego, California 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

JFC/jbg
10763319.doc